

# United States District Court District of New Hampshire

## Litigant's Manual for Courtroom Technology Courtroom 4

September 2005

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## Overview

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The US District Court, District of New Hampshire, launched a program several years ago to provide state-of-the-art technology for evidence presentation in the courtrooms. A key goal was to provide systems that are both sophisticated and flexible. The result of this effort is a choice of evidence presentation technologies to satisfy the different levels of requirements the litigants may have.

The evidence presentation systems are available in all of the trial courtrooms at the US District Court, except Courtroom 3. There are different configurations of the evidence presentation systems in the four courtrooms so you must know which methods you want to use to be sure that the correct courtroom is available for you, both for practice and for trial.

Courtroom 4 has the following functionality: Presentation Display System (PDS), Samsung document camera, VCR, DVD Player, touch panel annotation system, videoconferencing, court-provided PC's with Trial Director and CD-ROM, and the ability to connect litigant-provided PC into PDS.

The evidence presentation system, officially called Presentation Display System (PDS), is a video "network" through which litigants may display evidence. All four courtrooms have been equipped for litigants to display images using a Samsung document camera, VCR and a DVD player. The document camera is used to display photos, x-rays, sections of a document, and small objects. All courtrooms are also equipped with annotation for markup of display images, or for the creation of explanatory diagrams or visual aids on a blank "canvas" (the "blackboard"). Locations, which can view PDS images, are the judge's bench, witness, jury, counsel tables, deputy's workstation, and the court reporter.

If you intend to use the PDS for your trial, you must notify the court no later than the final pretrial conference. Plan for practice time in the courtroom in which you will have trial well in advance of the trial date. Practice time should be scheduled through the appropriate case manager at the court.

This guide is an operational manual for the PDS in Courtroom 4. It does not give you information or advice on how to prepare a case for electronic display of evidence. This guide provides the instructions on how to run each of the components in courtroom 4, including how to connect your own computer to the system where appropriate.

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# I.

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## **COURTROOM 4 TECHNOLOGY**

The technology implemented in Courtroom 4 allows litigants to display evidence using a Samsung document camera, VCR, DVD player, a court-provided computer, and a litigant's computer. The document camera, VCR, and DVD player are located at a lectern in the center of the courtroom between the counsel tables. There is a PDS (presentation display system) monitor at the lectern to allow you to view the PDS while working from the lectern. The lectern monitor is a touch panel monitor equipped with annotation capability. Each of the four counsel tables is also equipped with a touch panel monitor having annotation capability. This courtroom also has built-in videoconferencing capability, allowing witnesses to testify from a remote location.

There is one computer located at each of the four counsel tables. There are connections on each of the four counsel tables where the litigant's computer may be connected to the PDS. These allow presentation of evidence via the PDS directly from the counsel table.

There is a touch panel used for the PDS, which is controlled by the judge or courtroom deputy. This touch panel activates the display from the lectern, counsel tables, videoconferencing system, annotation system, and jury monitors. The litigant notifies the judge which source to select, lectern or counsel table (See **Figure 9** for your counsel table number); and when the jury monitors and the annotation system should be enabled. The document camera, VCR, and DVD player is selected by the litigant using a switch at the lectern called the **Display Source Selector** (see **Figure 2**).

### **Switching between the Samsung Document Camera, VCR and DVD:**

Litigants will use the **Display Source Selector** (see **Figure 2**) to switch between the Samsung Document Camera, VCR, and DVD for display of evidence. This device converts the signals into the appropriate format to be displayed.

Five options are available:

- VCR – This displays a videotape in the VCR with sound.
- VCR Mute – This displays a videotape in the VCR *without* sound.
- DVD – This displays a DVD in the DVD player with sound.
- DVD Mute – This displays a DVD in the DVD player *without* sound.
- Samsung – This displays anything on the document camera.

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## II.

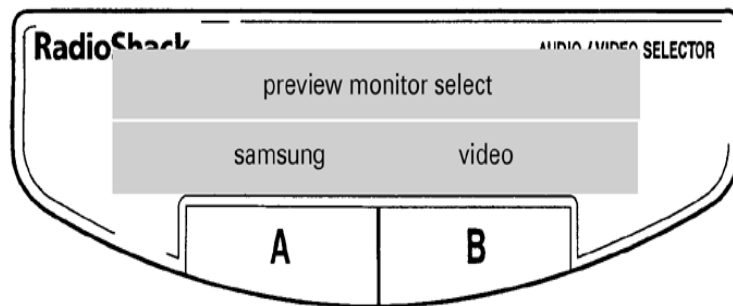
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### SAMSUNG DOCUMENT CAMERA

In order to use the Samsung document camera, counsel needs to request the lectern be the source. Activate the document camera by selecting **Input4/samsung** on the **Display Source Selector** (see **Figure 2**).

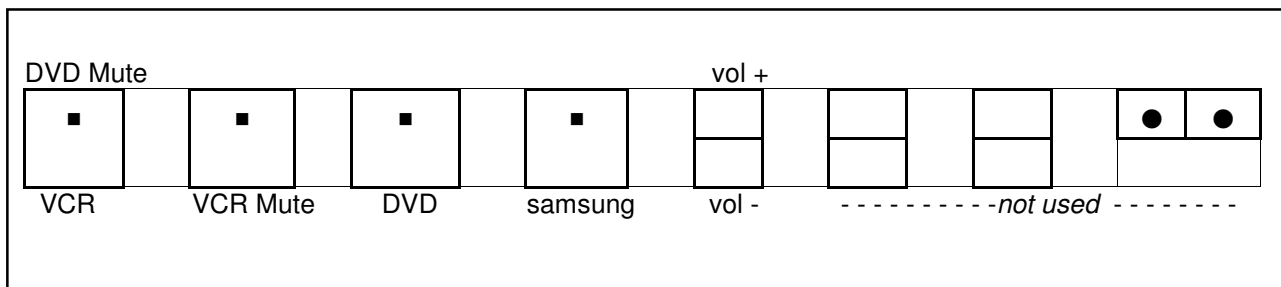
#### **Basic Operation:**

1. Touch the green **power** button, near the red lamp, to power this unit **on**. The red lamp will turn green.
2. Touch the **lamp** button once to power **on** the upper lights.
  - A. Touch the **lamp** button a second time to power **off** the upper lights, and power **on** the base lamp.
  - B. Touching the **lamp** button a third time powers all the lights **off**.



3. Touch the **mode** button to power **on** the green light next to **XGA**.
4. Switch **on** the small **Preview Monitor** to the left of the Samsung document camera and

**Figure 1 - Preview Monitor Selector** - controls which device displays on the preview monitor *only*. This does **not** control display capability to the rest of the courtroom. The control panel at Judge's bench does that.



**Figure 2**

**Display Source Selector** control panel - *controls what is seen on the PDS monitors*

make sure the **A/samsung** button is depressed on the **Preview Monitor Selector** (see **Figure 1**).

**Note:** If the small **Preview Monitor** gives you a screen of multicolored blocks or other distortion, instead of the object on the Samsung stage, double check the **Preview Monitor Selector** (see **Figure 1**) and be sure the **A/samsung** button is depressed. If the display is still unusable, power the Samsung Document Camera **off** and then **on**.

### **Displaying Printed Materials/Objects**

1. Press the **A/samsung** button on the **Preview Monitor Selector** (see **Figure 1**). This will show whatever is on the stage of the video presenter. Press the **freeze** button (The **freeze** button only effects the PDS display, not the **Preview Monitor**).
2. Place the document/object on the stage (the flat display surface), face up. While observing the image on the **Preview Monitor**, adjust the **zoom** buttons to obtain the optimum size.
3. Use the **focus** buttons for focusing the image to maximum sharpness.
4. Before changing documents, touch the **freeze** button. Use the image on the **Preview Monitor** to help you position the document. Touch the **freeze** button a second time when the new document is in place to **unfreeze** the display.

**Please note:** The Samsung can display a readable image of a full-page view of an 8½” x 11” document, but you probably won’t want to subject a jury to text that small! There are two ways you can handle this:

- A. If you really need to show the entire page, press the **freeze** button, and zoom in, very tightly, on the *top* and *bottom* margins this time (while viewing on the **Preview Monitor**). You will zoom in so that the top and bottom lines of your document text are slightly off the screen of the **Preview Monitor**. Now, press the **full/scroll** button, the last button on the right end of the Samsung control panel. When you **unfreeze**, you will be displaying, on the PDS, the upper two-thirds of your document. You can scroll the view around or up and down by using the arrow keys, arranged in a circle just to the left of the **full/scroll** button. This scrolling, unlike manually moving the document around on the stage, will be very smooth, not the jerky and dizzying effect you see on the **Preview Monitor** (or on the PDS if you forget to use the **freeze** button before you move your exhibit). If you touch any control other than the arrow keys, the Samsung will exit **full/scroll**, and return to its normal display mode.

## Transparencies/X-Rays

To start, **freeze** the main display, and use the small **Preview Monitor** to help set this up - press the **A/samsung** button on the **Preview Monitor Selector**.

1. Touch **lamp** to turn the base lights **on** (see *Operating Procedure* above).
2. Set the **nega/posi** button to the negative mode.
3. Use the **tone** button to get the best image.

## Control Panel Features

**lamp** - There are two built-in light systems for viewing. Materials such as printed material and 3-D objects use the upper lights, and transparencies use the base lights. When the **lamp** button is pressed first, the upper fluorescent lamps light. Pressed a second time, the upper lights go out and the base light comes **on**, illuminating the translucent stage. To turn all lamps **off**, press the **lamp** button a third time.

Use the upper lights to obtain a clearer image with better color, especially when the stage is not sufficiently illuminated by room lights or if a 3-d object is to be viewed.

**nega/posi** - This function is used to display negative film as positive images and vice-versa. The normal position is **Positive**. Pressing the **nega/posi** will switch to the **Negative** display mode (and **NEGATIVE** will display briefly on the monitor). Press it again, and you will return to Positive display mode (and **POSITIVE** will display briefly on the monitor).

**tone** - Try this to get the best image quality. It alternates between **NATURAL** color and an **ENHANCED** mode. Try both to see which gives you the best image.

**zoom** - Pressing **T** (on the remote) or **up arrow** button enlarges the image. Pressing **W** (on the remote) or **down arrow** reduces the image.

**focus** - The two buttons marked **focus** are the focus controls.

The Samsung doesn't have an Auto **focus** mode, but its lens has a very deep "depth of field" (this means you don't have to try hard to get a clear, sharp image)! Once focused, you shouldn't have to change it. If you continue to adjust the **focus** once the image is sharp, you might find that the **focus** control behaves like a "micro-zoom" control, slightly enlarging or reducing the image.

**iris** - a.k.a. the “Brightness” and “Contrast” control. You should only need to adjust this for very light or dark documents, or possibly for 3-d objects. Adjust while watching the monitor for the best image.

**awc** - This is to calibrate the display color balance. Does your white document look pink or purple? Is that orange object displaying yellow? Place a plain white piece of paper on the base and touch this button. The screen will display **white balance** momentarily, and then your document should look better (more natural). You might also need to do this if you switch from room lights to one of the Samsung’s built-in lamps.

**int/ext** - The normal display mode is **INTERNAL**. This will display whatever is on the Samsung stage. Press this button once and **EXTERNAL** will be displayed briefly on the PDS monitor. Normally, there is nothing connected to the external hookup. Press it again to return to **INTERNAL** display mode.

**full/scroll** - This button activates the smooth, digital scrolling display mode. Use the arrow keys just to the left of the **full/scroll** button to control the display.



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### III.

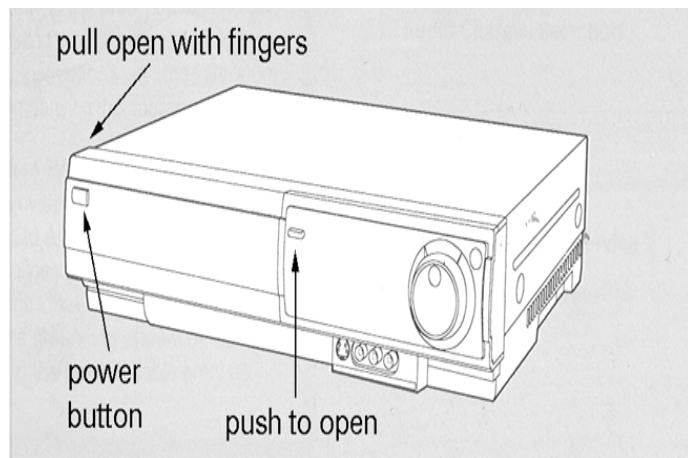
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#### VCR

The VCR offers the usual features for playing videotapes. Use the appropriate buttons inside the front panel or on the remote. The VCR is also equipped with a jog dial for frame-by-frame playback as well as a shuttle ring for slow-motion playback. See the sections below for instructions on using these features on the VCR. There is a small television (the **Preview Monitor**) located at the lectern with which you may view your tape before showing it in court.

#### Play videotape:

1. Press **Input1/video** on the **Display Source Selector** (see **Figure 2**) and press the **B/video** button on the **Preview Monitor Selector** (see **Figure 1**) to select the VCR.
2. Open the front panel (either press the **push to open** button, or open the panel with your fingers) to expose the tape slot and the VCR controls (see **Figure 3**). Insert tape into the VCR. The VCR will power on automatically. If the videotape safety tab has been broken, the tape will automatically start playing. Otherwise, you must press **play/>** on the VCR or the remote control.
3. Use either the controls inside the front panel of the VCR or the remote control to select other functions, except for volume.
4. Volume is adjusted by pressing the **vol+** or **vol-** buttons on the **Display Source Selector** (see **Figure 2**).

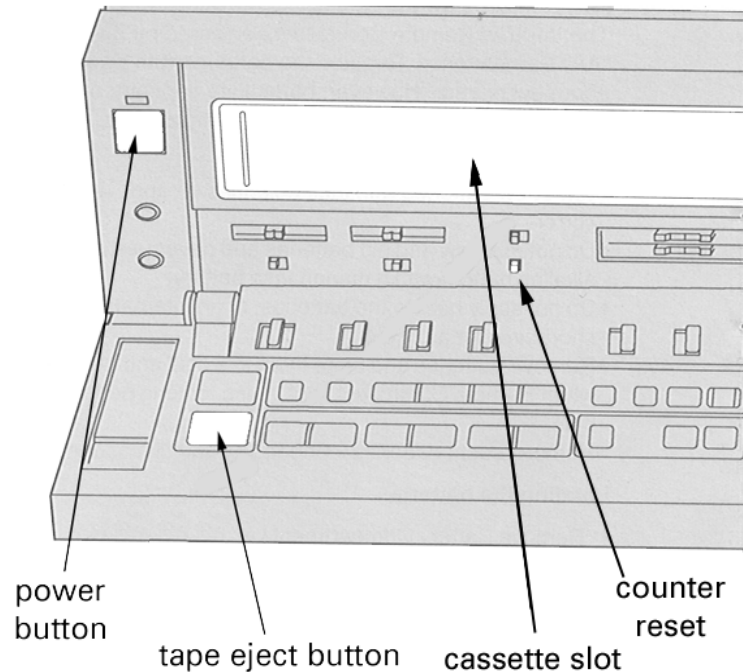


**Figure 3** - open the VCR with the button or your fingers

#### Unedited tapes:

It is preferred, although not required, that litigants have available an edited video for playback during any court proceeding. If such edited version is not available, the following features should assist you in presenting the unedited tape.

Real-time tape counter The VCR is equipped with a real-time tape counter that shows the running time in hours, minutes, and seconds. You can easily determine how long the tape has been running, where objectionable material is located, or how much time is left on the tape. When a tape is inserted, the counter will reset to **00:00:00**. There is also a **counter reset** button to reset the tape counter to zero at any time (see **Figure 4**).

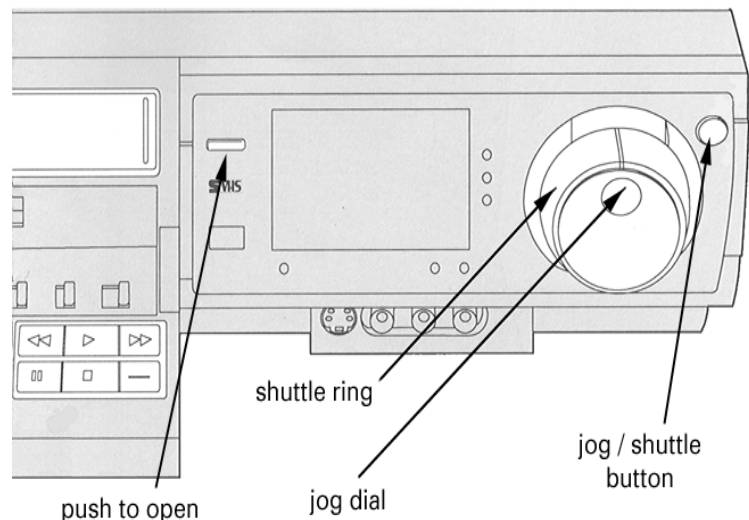


**Figure 4** - *press the counter reset button the zero the counter at any point on the tape*

Headphones to monitor audio If you want to verify the audio in addition to using the counter, e.g., to be sure exactly when to resume viewing, there are headphones attached to the **Preview Monitor** for your use. The volume control buttons are on the top of the **Preview Monitor**.

### Video Editing Examples

Jog Dial and Shuttle Ring These controls allow you to vary the forward and backward playing speed, and to advance or retreat the tape a frame at a time (see **Figure 5**). Not just for editing, these controls can also be used during a presentation to break a video segment into sequential frames, or to advance slowly to a single freeze-frame image.



**Figure 5** - *the jog dial and shuttle ring allow very precise positioning of the tape*

### **Using the keys on the VCR or the remote:**

1. Press the **B/video** button on the **Preview Monitor Selector** (see **Figure 1**).
  - A. Press **pause/||** on the VCR or on the remote to temporarily stop playback. The VCR displays a still image.
  - B. Press Input **3/blank** on the **Display Source Selector** (see **Figure 2**). This will cause all screens to go blank, except the small **Preview Monitor**.

**Note:** You can also select **Input 4/samsung**. While the document camera is displaying, the videotape will not be seen or heard on the PDS.
  - C. Press **pause/||** again or **play/>**, to resume playback of the video. Then press and hold **fast forward/>>** or **rewind/<<** to speed to the predetermined time on the tape. If you “tap” (press and release quickly) **fast forward/>>** or **rewind/<<** while the tape is playing, the tape will play continuously at the higher speed until you press **play/>** to resume normal playing.
  - D. Press **pause/||** to again stop the tape. The VCR displays a still image.
  - E. Press **Input 1/video** on the **Display Source Selector** (see **Figure 2**) to select the VCR when you are ready to present the videotape material.
  - F. Press **pause/||** to resume playing the tape.
2. Press the **A/samsung** button on the **Preview Monitor Selector** (see **Figure 1**) when you are finished editing the tape. This will allow the **Preview Monitor Selector** to be used with the document camera.

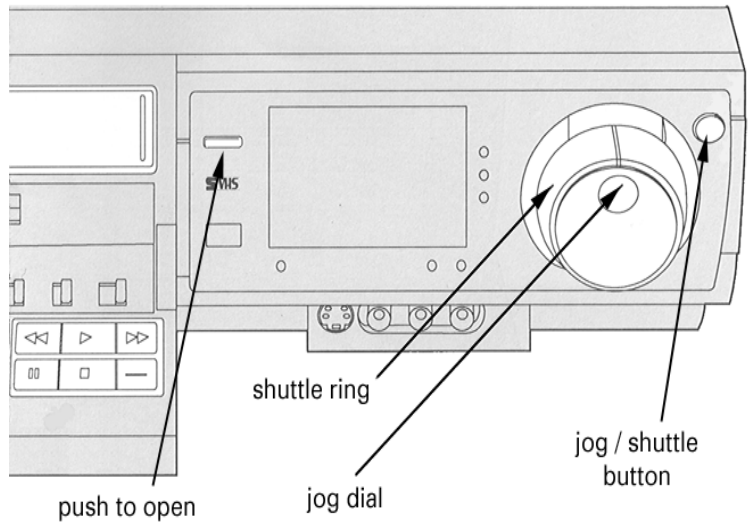
### **Jog dial and Shuttle ring:**

1. Press the **B/video** button on the **Preview Monitor Selector** (see **Figure 1**).
  - A. Press **pause/||** on the VCR or on the remote to temporarily stop playback.
  - B. Press Input **3/blank** on the **Display Source Selector** (see **Figure 2**). This will cause all screens to go blank, except the small **Preview Monitor**.

**Note:** You can also select **Input 4/samsung**. While the document camera is displaying, the videotape will not be seen or heard on the PDS.

- C. Press the **jog/shuttle button** (see **Figure 5**). The button will light, and the VCR displays a still image.

- D. Rotate **shuttle ring** (see **Figure 5**) backwards or forwards. The playback speed varies in the forward and backward directions depending on how much, and which direction you rotate the **shuttle ring**.



- E. When you are near the point on the tape you want to start from, rotate the **shuttle ring** to the center position (the ring will “click” softly when in the center position). The VCR displays a still image again.

**Figure 5** - the jog dial and shuttle ring allow very precise positioning of the tape

- F. You can precisely locate your starting point by rotating the **jog dial** (see **Figure 5**) with your fingertip. Move it back and forth to move the tape frame by frame.
- G. When you have located your starting point, press the **jog/shuttle button** again. The light goes off, and playback stops.
- H. Press **Input 1/video** on the **Display Source Selector** (see **Figure 2**) to select the VCR when you are ready to present the videotape material.
- I. Press **play/>** to begin playing the tape.
2. Press the **A/samsung** button on the **Preview Monitor Selector** (see **Figure 1**) when you are finished editing the tape. This will allow the **Preview Monitor Selector** to be used with the document camera.

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## IV.

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### **DVD PLAYER**

**NOTE:** If you want to play a DVD *without* sound, you'll need to turn on the VCR in addition to turning on the DVD player. Be sure the channel of the VCR is A1.

1. Turn on power to the DVD Player.
2. Press the **open/close** button to open the DVD slot.
3. Insert the DVD into the ejected slot.
4. Press the **open/close** button to close the DVD slot.
5. Select **Input 3/DVD** on the **Display Source Selector** (See **Figure 2**) and press the **B/Video** button on the **Preview Monitor Selector** (See **Figure 1**). If you want to play a DVD *without* sound, select **Input 1/DVD Mute**.

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## V.

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### CONNECTING A LAPTOP TO THE PDS

A litigant may use a computer for presenting evidence. In Courtroom 4, this may be the court-provided computer, available at each counsel table or it may be a litigant-provided computer. A computer provided by the litigant may be connected to the PDS via a connection panel behind the monitor on the counsel table (see **Figure 6** below).

#### **Court-provided computer:**

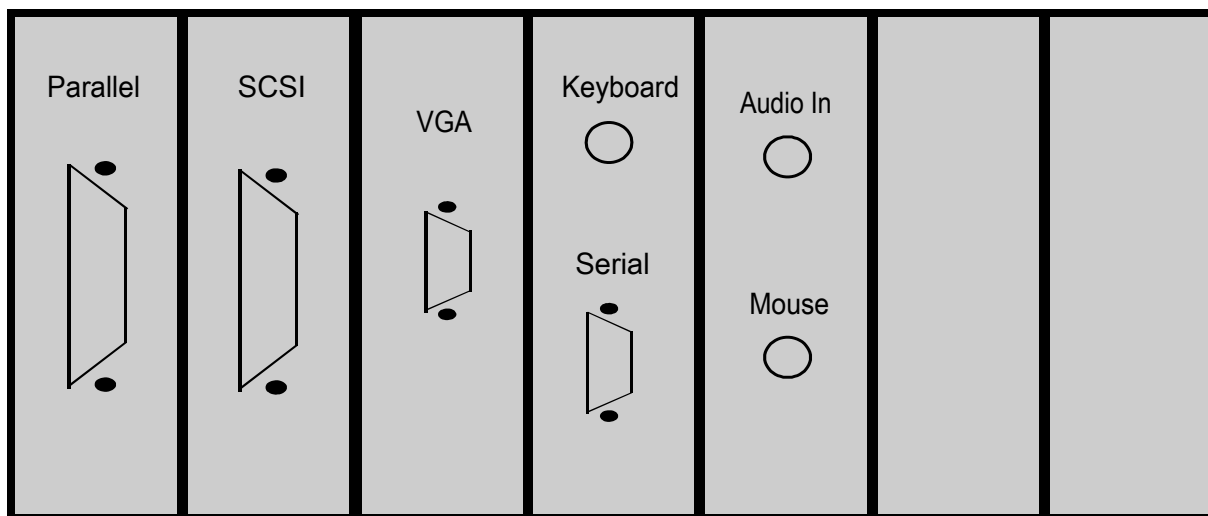
The applications loaded on the court computer include *Sanction*, *WordPerfect*, and *Microsoft Office 2003*. The PC has a CD-ROM drive so that the litigant may bring exhibits loaded on a CD for display from the computer.

If using the court's computer be sure to allow plenty of time before the trial date to become familiar with it. A member of the court's Information Technology Department will assist you when first familiarizing yourself with the computer.

The court-provided monitor may be used to both view the PDS images and to work on the computer locally. To switch between viewing the PDS and the local computer, use the switch located to the right of the keyboard tray.

#### **Litigant-provided computer:**

If a litigant prefers to use his or her own PC for presentation of evidence, there is a panel on each of the four counsel tables for connection to the courtroom PDS (see **Figure 6**). The connections available for use are: the **VGA** (HD15 male-male), **Keyboard** (PS/2 female), **Mouse** (PS/2 female), and the **Audio In** (1/8" stereo miniplug - female). At a minimum the VGA connection must be used to activate the PDS connection. **All cables have been supplied by the courthouse and are already connected at each litigant table..** See below for a list of cables.



There is a power strip near this panel for easy access to power for the computer. If the computer is a laptop, it must be set for external monitor. This is usually accomplished by holding the “Fn” key (located at the bottom left corner of keyboard) and one of the “F” keys (located on the top row of the keyboard). If the computer is a laptop and the litigant wishes to use an external keyboard, it is up to the litigant to bring it for this courtroom.

### **Cable List:**

The only cable NEEDED is:

1 - **VGA cable** - HD15 - male (panel) to HD15 - male (PC)

Other Cables if litigant desires:

1 - **Audio cable** - 1/8" stereo miniplug - male (panel) to 1/8" stereo miniplug - male (PC)

The configuration for the computer end of the cable assumes industry standard connections on your computer. It is in your best interest to verify the connections on your computer to be sure that you arrive at the court with the correct cables. If you cannot locate a cable with the correct combination of male/female connections, a gender changer may be the solution.

\*If you are using a laptop (or other portable), your PC may only have a single miniDIN (female) socket for using an external **Keyboard OR Mouse**, one device at a time. In order to use the system with the Courtroom 4 PDS, you will need a PS/2 splitter (Y-adapter) to allow you to attach a **Keyboard AND Mouse** at the same time. Many laptops come with these adapters. If you need to obtain one, contact your computer dealer, or a supplier of PC cables.

### **Selecting the source of input to the PDS**

There is a touch panel for the courtroom, which determines the active source of input to the PDS, which is controlled by either the judge or the courtroom deputy (case manager). There are five sources of input to the PDS in Courtroom 4: the lectern, counsel table 1, counsel table 2, counsel table 3, counsel table 4, and videoconferencing. It is counsel’s responsibility to request that the touch panel be set to the location being used for the display of evidence. You can tell what number counsel table you are using by looking at the chart at **Figure 7**.

When the document camera, VCR, or DVD Player is being used, the designation of the source for the PDS is the lectern. When the lectern is the source, the litigant is responsible for switching between the document camera, VCR and DVD Player as appropriate, using the **Display**

**Source Selector** (see **Figure 2**) and the earlier paragraph in this document *Switching between Document Camera, VCR, and DVD Player*).

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## VI.

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### **CONTROLLING THE JURY MONITORS**

The monitors in the jury box and gallery are switched separately from the rest of the monitors on the PDS. This is to help prevent the display of inadmissible evidence to the jury. It is the litigant's responsibility to be sure that the jury monitors are on when needed. There is a light on the top of the jury box indicating whether the monitors are on or off.

Each time the PDS source is switched, the jury monitors are automatically turned off. That is, if a counsel table was the source and someone requests that the lectern be made the source, when the judge or courtroom deputy activates the lectern, the jury monitors will turn off. The litigant must request that the jury monitors be turned on once it is appropriate for the jury to view the evidence on the PDS.

**Important note:** When the Document Camera, VCR, and DVD Player are in use, the PDS source is the lectern. Switching between the Document Camera, VCR, and DVD Player using the **Display Source Selector** (see **Figure 2**) does not change the *PDS source*. The source is still the lectern. If the jury monitors were on, they will stay on. In this situation it is important to request that the jury monitors be turned off before displaying evidence, which has not yet been admitted.



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## VII.

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### ANNOTATION SYSTEM

Touch panel monitors are used for the annotation system in Courtroom 4. The following workstations have the annotation ability: judge, witness, lectern, and all four counsel tables. Once the annotation system has been activated by the judge or courtroom deputy (case manager), simply use a stylus or your finger to draw on the monitor. **DO NOT** use the tip of a pen or pencil.

Activation of the light pens is controlled by the same touch panel as the PDS and jury monitors. Each time the PDS source is changed; the annotation system is automatically turned off. To activate them, the litigant must request annotation system be turned on. Any marks, which were previously displayed, will still be there. To clear them, see the procedures below on using the annotation system.

#### Annotation Instructions:

**Draw:** Use stylus or finger and press against the screen while drawing.

**Erase last mark:** Tap on the right-top corner of the monitor. Repeat this procedure for each mark you want to erase.

**Erase all marks:** Tap on the right-bottom corner of the monitor.

**Change The Color:** Tap on the left-bottom corner of the monitor. With each tap a color block will appear at the bottom of the monitor, indicating which color has been chosen.

**Activate the blackboard:** Ask the case manager to activate the “blackboard” function. This will remove all background video, leaving you with a solid black screen. Any light pen marks made before the “blackboard” is activated will remain on the screen.

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## VIII.

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### **BARCODE READERS**

The only time the bar code reader will be used is when a litigant is presenting evidence from an application on the court computer. The application uses bar codes to provide an efficient means for retrieving exhibits.

Follow the necessary procedures to start the PDS and the workstation. There are no buttons on the bar code reader. Swipe the point across the bar code. The system acknowledges receipt of the code by issuing two quick beeps. If you do not hear them, swipe the bar code again. It may take a few tries to get accustomed to the pace of the swipe at which the system most consistently receives the bar code.

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## IX.

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### TROUBLESHOOTING

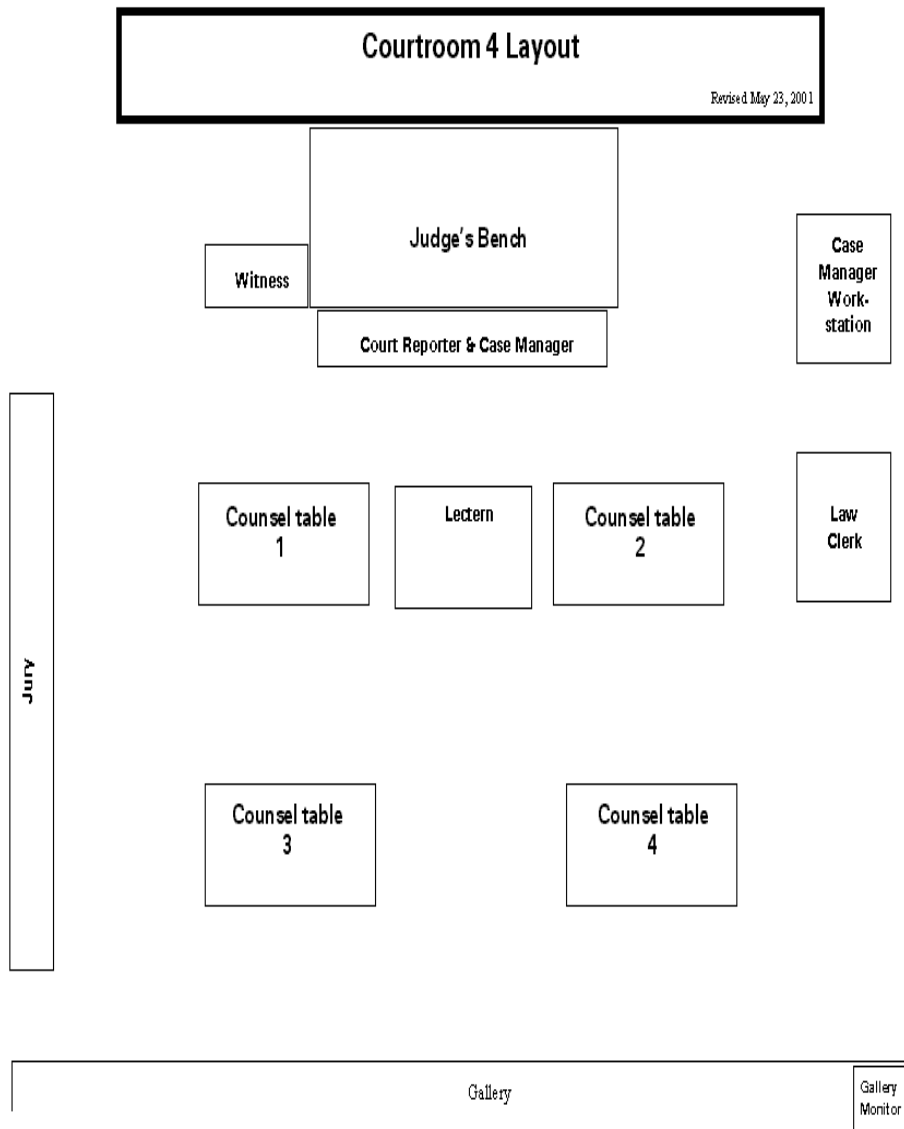
**Important note:** It is highly recommended that you schedule time in the courtroom to test the features you intend to use, including the features in the software you intend to use. The more complex your presentation, the earlier you should be testing in the courtroom. This is the best way to understand how your presentation will look to the court and jury and to ensure that you have chosen the system features, which are most effective for your case.

\* Should the Samsung document camera display become unstable, or if the buttons or the display freeze (and you didn't press the **freeze** button), power the unit **off** for a few seconds (touch the **power** button), then back **on**. Everything should return to normal.

\* If the small **Preview Monitor** gives you a screen of multicolored blocks or other unexpected distortion, double check the **Preview Monitor Selector** (see **Figure 1**) and make sure the **A/samsung** button is depressed. If the display is still unusable, power the Samsung document camera **off** and then **on**.

\* An 8 1/2" x 11" document displayed in full-page mode on the visual presenter could be difficult to read. See *Displaying Printed Material/Objects*, item 4 in the Samsung document camera section of this manual for ideas.

\* Documents displayed from evidence presentation software have some limitations when displayed on the jury monitors. We have discovered that some image enhancements/enlargements do not display clearly, while others do.



**Figure 7** - the layout and table numbering of Courtroom 4